

ABOUT THE DEVELOPMENT OF YOUNG RACE WALKERS

By Vladimir Morozov

There is a variety of methods available for the development of young athletes that might differ considerably from one approach to another. In the following text Russian coach, Vladimir Morozov, outlines his views on the training of young race walkers in the 8 to 17yrs. age range. The article is a summarized translation from Legkaya Atletika, Moscow, No. 10, October 1996. Re-printed with permission from Modern Athlete and Coach.

INTRODUCTION

Walking is the most natural method of locomotion for humans. As we know, walking is also an excellent form of exercising, involving most muscle groups and the cardio-vascular system. Although race walking requires a special technique, it differs from ordinary walking mainly by a short double-support phase. Even the double-support phase, although required by race walking rules, has virtually vanished among elite athletes.

What are the qualities required for race walking? Above all, endurance and speed combined with movement skill and coordination. Race walkers also need flexibility in the lower extremities and hip-pelvis joints, as well as strong back and abdominal muscles. All these qualities are important in the race walking technique, made up from single strides, divided by a double-support phase. The forward and rear leg actions are in turn divided by a vertical phase, separating the forward and rear support periods.

There is slight incline of the pelvis towards the swinging leg during the vertical phase. This does not mean that the pelvis should move sideways, as it would create a fault that must be avoided at all cost. As the walker's centre of gravity moves over the support leg, the swinging leg begins the next stride until the heel touches the ground and the weight moves over the now supporting leg. There should be no forward lean as this would lead to a bend in the knee joint and a premature lifting of the support leg in the vertical phase.

The arm action in race walking depends on the walking speed. The faster an athlete walks, the more are the arms bent. The arms help to absorb the leg drive and the rotation of the trunk. The strong backward movement of the elbows also assist in an active movement of the pelvis along the vertical axis.

TALENT SEARCH

Finding future race walking talent is relatively simple. All it needs is to ask children during a physical education period to walk and request them every 5 to 10 minutes to walk faster, faster and as fast as possible. Children who have potential for race walking usually walk fast, extend the knee joints, avoid a backward movement of the pelvis and don't drop their shoulders. The others present an entirely different picture. They drag the feet, keep the legs bent in the knee joint, bustle forward in an uncoordinated manner and drop the shoulders forward.

It is usually possible to find about five children in each class with race walking potential. Unfortunately they belong to three groups of which the first group can be described as "good legs - poor head". Children belonging to this group don't like training but wish to become Olympic champions in no time. They like winning and often lose interest in the sport after a couple of defeats.

The second group can be described as "poor legs - good head". Children belonging to this group are usually physically average but long to achieve some target. They train regularly and make steady improvement to reach good results. Few belong to the third group of "good legs - good head". Unfortunately they also have shortcomings and are often carried away by the ease of early successes, particularly in easy competitions without serious rivals.

TRAINING RECOMMENDATIONS

Continuous training processes become monotonous and young athletes rapidly lose interest. This can be avoided by frequent competitions. Even during the preparation period it is advisable to organize twice a month races over non-standard distances, such as 1000, 1500, 2000 and 3000m. These competitions stimulate training and provide youngsters with an incentive to qualify for the different level badges under the national scheme.

Race walking training takes time and improvements occur slowly in stages. A youngster, who begins training at the age of eight, can expect to perform reasonably well when he or she is 17 to 19 years old. Another two to four years are usually needed to reach international standards, provided that suitable competitions are available.

It is common to begin training with a month long introductory period, made up from walks in the forest, games, mobility exercises and once a week a steady cross-country walk. The load in the last depends on the age and physical fitness level. A rough guide would be 1km or 5 minutes for 8-year-olds up to 10km or 50 minutes for the 17-year-olds. This load can be doubled once a week.

Walking pace is gradually increased as the preparation period begins. During the next five months attention is directed to the training volume in time, as well as in the covered distance. Recoveries receive special attention in order to avoid stress.

WEEKLY CYCLES

The following program represents a typical weekly training cycle recommended for young race walkers:

Monday

The aim is to develop the cardio-vascular system by using the interval method. The heart rate in this type of work should not exceed 180/min. Short interval distances are employed, beginning with 9-minute effort phases and 4:30 minute recoveries. The effort phases and recoveries are gradually reduced, reaching 2-minute effort phases and 1-minute recoveries by the end of the preparation period. This, converted into distances, means about 1800m in the beginning, reduced to 400m repetitions at the end of the preparation period.

How does this fit into the age range? Let us compare a 12-year-old boy with a 17-year-old youth. The first begins with a 25 minutes or 5km training volume, compared with 50 minutes of 10km for the 17-year-old. The boy performs 2 x 9 min. + 1 x 7 min. with 4:30 min. recoveries, his older counterpart 5 x 9 min. + 1 x 5 min. with 4:30 min recoveries. At the start of the competition period the 12-year-old executes 12 x 12 min. + 1 x 1 min. with 1 min. recoveries, the youth 25 x 2 min. with 1 min. recoveries.

Tuesday

The aim is to develop general endurance and improve movement coordination. These tasks are solved by road walking. The length of the training distance is increased according to the athlete's age. For example, when a 9-year-old begins with 4km, his distance is doubled to 14km at 14 yrs., reaching 20km at 17yrs.

Wednesday

The aim is active rest, made up from a short cross-country walk and indoor games.

Thursday

The aim is to develop local muscular endurance. This task is solved similarly to the method employed on Monday but the repetitions take place over longer distances. Younger ages begin with 8 km or 40 min. repetitions and 10 min. recoveries to progress towards the end of the preparation period to 1 km or 5

min. repetitions with 2:30 min. recoveries. Older age groups walk to prescribed distances without recoveries. For example, 4km or 20 min. without recoveries for 11-year-olds, 40min. for 17-year-olds.

As the competition period approaches, training is changed so that younger ages complete 4 x 1 km with 2:30 min. recoveries and older ages 10 x 1 km with 2:30 min. recoveries. As the competitions start and an athlete is aiming for a 45 min. performance in the 10 km event, the 1km repetitions should be covered within 4:18 min.

Friday

Rest.

Saturday

The aim is to develop specific endurance using the tempo training method which corresponds closely to racing situation. In this training session every athlete covers the kilometer at a fast pace, calculated so that each 5 km stretch is walked at a speed 2 min. slower than the athlete's personal best. This means a time of 27 min. over 5 km in training when racing aim is to reach 25 min. This type of training is tough and sets high tasks for the organism.

Sunday

A recovery day with an hour of steady walking in the forest.

When the main training sessions take place in the evening, young athletes go for a steady walk in the morning. The morning walk can be alternated by easy jogging. The distances for the morning session are based on the young athletes age. For example, 8-year-olds only 1 km, 9-year-olds 2 km, 10- year-olds 3 km etc.

ADDITIONAL TRAINING ASPECTS

General physical conditioning can create problems as many children dislike performing what they consider boring exercises. Nevertheless, this author believes that general physical conditioning is extremely important and should take place during the preparation period during the main training session or as a separate workout. The recommended exercise complex should include the following:

- Pull-up, back strengthening exercise on a gymnastics bench in prone position, abdominal strengthening sit-ups with legs supported, rope climb, bounding on the spot with no knee bends.

As an example, an 8-year-old is expected to complete 2 repetitions in the pull-ups, 3 repetitions in the back extension exercise, 1 repetition of the rope climb, 10 repetitions of sit-ups and 100 bounds on the spot. The corresponding repetitions for a 17-year-old are expected to reach 20 in the pull-ups, 20 in the back extensions, 30 in the sit-ups, 10 in the rope climb and 1000 in the bounding. The above outlined improvement represents sufficient development for race walking.

Additional exercises are included in the warm-up procedures prior to the interval and tempo walks. These additional exercises are race walk specific, performed in a 10 min. walk during which the position is changed every 30 seconds. The exercises are made up from the following:

- Walking with straight arms.
- Walking with hands held behind the head.
- Walking with hands on the hips.
- Walking with hands on the shoulders.
- Walking with arms performing the swimming back stroke arm action.
- Walking with legs crossing in the front:
- Walking with a sideways cross-stride to the left and to the right.